

ABSTRACT OF THE DISCLOSURE

An aberration correcting unit includes: a first element having a liquid crystal sandwiched between first electrode layers, the first element having a first predetermined orientation direction and providing a light with a phase change by applying a voltage; a second element having a liquid crystal sandwiched between the second electrode layers, the second element having a second predetermined orientation direction that is substantially perpendicular to the first orientation direction and providing a light with a phase change by applying a voltage; and a polarization-direction changing element which is arranged between a light source of the light beam and the first and second elements to change a polarization direction of the light beam.